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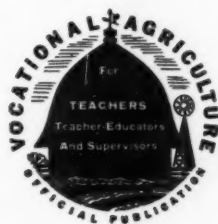
January, 1942



No. 7



TODAY there is not a single job on a farm concerned with the actual production of farm products which pays a farm or a member of his family as much per hour as they can earn doing their own carpentry, painting, paper-hanging, and even the repairing and rebuilding of their tractors —H. E. Babcock.



The Agricultural Education Magazine

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Editorial Comment

Against the Time When It's Over

STRANGELY, the teacher of vocational agriculture was the first person in thousands of communities to have a direct responsibility in the current national-defense program. But organizing and supervising defense-training courses for out-of-school youth was only the first of a series of his responsibilities in the present emergency.

A review of history should convince the most skeptical that severe readjustments follow wars, and that such reconstruction periods sometimes are as disastrous as the war itself. That a cycle similar to the one that occurred during and following the previous World War has been started is indicated by rising prices, restricted supplies, war slogans, name calling, and many other things. The teacher of vocational agriculture has an inescapable responsibility in helping farmers plan farming programs so the latter may not find themselves so far from shore when the tide goes out that they will not be able to reach the dock.

One of the new responsibilities the teacher of vocational agriculture should recognize is to parallel every OSY defense-training class with a series of meetings to assist especially those young men in the group who plan to or may enter farming after their return from a fling in industry at high wages or a hitch in the army at low wages.

Of these young men, those who go into the army and return to farms will have the most difficult adjustment to make, but if they really want to farm, and will plan, with even small savings and the bonuses and other preferences which they are practically sure of receiving, they may be able to enter farming advantageously after their army days.

The young man who leaves the farm to go into industry at high wages will have a good chance of hedging against the time when riveters and welders will be a dime a dozen. An ideal situation would be one in which this young man could contract for land at the present equitable price and pay off much of it with the expanded pay in industry. Another good solution of his problem is to invest in government or other first-rate securities, to be held until the time that land, livestock, and equipment prices have dropped after the defense boom. If, however, he spends his money foolishly or gets anxious and buys land and equipment at inflated prices, he will find himself in the same precarious position that his father found himself after the land boom which developed very soon after the close of World War I.

Most fortunate will be the young man who has been able to stay on the farm thruout this period, turning a cold shoulder to the allurements of the high prices for labor in industry. Particularly fortunate will be the young man who already has a good supervised farming program and can remain on the farm to expand and develop his holdings. Such young men should be warned against over-rapid expansion of their enterprises by buying things at increasingly higher prices. Expansion should come thru natural increase and thru a plowing back of profits.

Another responsibility most teachers of vocational agriculture have not had previously is to stand between the adult farmer and the allurements resulting from high prices for farm products. Too many farmers are scurrying around trying to buy back into the hog business since prices have gone up. Others are yielding to the temptation to go out and buy dairy cows at high prices instead of improving the production of the cows they already have. And if the war continues for some time, the teacher will have to fight the idea that high farm prices are here to stay.

In helping all-day, part-time, and evening groups plan farming and savings programs that can weather the post-war adjustment period with a minimum of difficulty, the teacher of vocational agriculture will continue to prove himself indispensable.—W. P. Beard, Washington, D. C.

No nation has ever achieved permanent greatness unless this greatness was based on the well-being of the great farmer class, the men who live on the soil, for it is upon their welfare, material and moral, that the welfare of the rest of the nation ultimately rests.—Theodore Roosevelt.

Discovering and Selecting Leadership

MANY articles appearing in our publications refer to "our leadership" in this or that field. Should we pause to consider who have been our leaders, who are our leaders and who are to be our leaders in the field of vocational education in agriculture? If such a consideration is timely, should we also consider how our leadership is discovered and selected?

In thinking of this all-important issue, let us give full recognition to the early, or pioneer leaders who entered our field of work when the vocational movement was new or in its promotional stages. We respect the men who have shouldered and carried the burdens of responsibility for two or more decades so faithfully and well. Perhaps we have passed thru a period of comparative stability in our leadership and that during this period another generation of faithful workers have stayed at home, or in the background, to do much of the routine work. At least, many have commenced to grow old "in-the-service" or have ceased to be ambitious for leadership positions or responsibilities.

It seems obvious that there must be a third group, or generation, of younger men who have commenced to assume certain local responsibilities in either the supervisory or teacher-education areas of our program. Is it this group that we should now consider in relation to discovering our future leadership? Their achievements may be quite different from the achievements of our earlier leaders. How, then, shall we evaluate present-day achievements in relation to selecting our future leadership? What recognition should be given for scholastic accomplishments; quality and importance of research; published articles or other writings; evidence of progressive thinking; contributions to local, state, and national committees; rank and responsibilities in local organizations (the size and importance of the organizations); comparative success in discharging regular responsibilities; tenure and breadth of experience; personal qualities, including health, vigor, and capacity for work; and demonstrated success in assuming leadership responsibilities. Many other desirable qualities may be added to this short list, among which the most elusive quality may be the degree to which the individual has contributed to the success and thinking of others.

After recognizing certain basic qualities of leadership, let us consider how we may select or even "try-out" certain young leaders. Should they be inducted gradually, or given certain major responsibilities immediately? Perhaps this compound question can be answered best by stating a few ways in which promotions or advancements are made or gained.

The selective process is often left to mere chance of time or place; a sudden death, a removal or a promotion of another may serve as an opportunity for one on the waiting list; a strong backing or a pressure group may help, also; the passing around of favors has been known to follow a reorganization or "shake-up"; many have waited for years for "outside" offers in order to gain "inside" recognition; changes in administration and local policy have caused drastic changes in the promotional process; and personal likes, opportunities for contacts with the "right people" and civil service examinations have all played their respective parts in the process.

Many other organizations recognize younger leadership and provide for its gradual induction. It would seem that we have a basic problem involving certain scientific procedures to be used in the discovery and selection of our future leadership. Can our "strong back-field" of central leadership select an aggressive line from the busy, hard-working recruits?—E. R. Hoskins, New York

New Binder Meets with Favor

Last July we announced a new, three-ring binder for copies of the magazine. The reactions received from men who are using them indicates that the binder is just what they have been looking for to help keep files of back numbers in good order. This attractive binder is available, postpaid, for 50c. Orders should be sent directly to L. L. Anderson, Meredith Publishing Company, Des Moines, Iowa.

A. K. GETMAN

Professional

R. W. GREGORY

Evaluation from the Point of View of a Teacher

L. J. HAYDEN, Supervising Principal and Teacher of Agriculture,¹
Charleston Township School, Wellsboro, Pennsylvania

AFTER reading the "debate" recently conducted in the columns of our magazine by two eminent leaders in the field of agricultural education, we who are out on the firing line, and thus more directly affected than any other person when the evaluation is made, should express our reaction to this development. I am attempting to set forth a teacher's point of view that is entirely personal and is possibly not in accord with the views of many teachers of agriculture.



L. J. Hayden

Dr. Hamlin raises the question of who is responsible for the committee's attempt to set up national standards, and that he has heard of no general demand for such standards. I have no desire to justify the actions of the National Committee in any way, neither do I desire to attack their point of view. However, I feel that many conscientious teachers of agriculture have often thought about their own program, their methods and practices, and secretly wondered if they were on the best road.

We teachers have been asked to attend many conferences and conventions in which we listened to one of our own members describe in glowing terms the operation of a successful enterprise, for example: a very successful part-time school at "Hatfield Center," and heard praises heaped upon him by our superiors. We have secretly felt a little guilty that our part-time work was not equally successful and have gone home feeling "pretty low." We wonder what the trouble is and how we can do something for "Anderson Twp." like this man is doing at "Hatfield Center." Then imagine the shock we get when about six months later we learn that "Hatfield Center" has no F.F.A. chapter. The teacher has been too busy with other things to organize one. This news makes us feel a little better but it presents a still larger problem, namely: What is a good program for vocational agriculture? The above example is perhaps too glaring, but typical of many parallels on a less important plane.

Benefits From Assistance in Evaluation

Teachers of agriculture have always been able to write their own course of study for agriculture, but most states have a course of study for general science, English, mathematics, and other subjects. Many teachers of agriculture ap-

preciate this freedom but recognize its responsibility.

It is for this purpose alone that I am sure many conscientious teachers, those of one or two years experience and those of many years experience, will welcome a "yardstick" which can to some extent be accurately placed on their program. Thus they might see that their program swerves to the left of the average for one item but is considerably to the right on another item, thereby compensating an apparent deficiency. Neither should the teacher nor others receiving the results of the evaluation hold that a swing to the right or to the left is a deviation from the best program if, in the light of local conditions, the deviation can be justified. In other words, the national standards will not fit all local conditions but it can serve a valuable purpose in causing the local teacher to carefully inspect his own program, to justify certain phases of it, or to give more attention to specific items.

At this point let me inject my opinion as to how the evaluation standards should be used. First, the teacher alone must request that his program be evaluated. It must be of his own free will and voluntary request in order to get an accurate evaluation. The very moment any supervisor places this evaluation program on his teachers he gets especially prepared results. Any recommendations coming out of such an evaluation will not be nearly so welcome as if the teacher has made the request for the evaluation. Second, the results of the evaluation should be given to the teacher. It is his program that was evaluated. A carbon copy, unidentified in any way, could be sent to the National Evaluation Committee for statistical purposes to be used in changing the standards from time to time as conditions change.

In the above paragraph we concede a point in Dr. Hamlin's criticism; that there is distrust in having an outside committee evaluate the program. This is true when the state supervisors or state teacher trainers come or send a committee to a teacher asking that permission be given for such an evaluation. When the first evaluations were made it was explained as a type of experiment. When the evaluations were made more or less wholesale last year the teachers began to feel that they were being or were to be rated. I know that this feeling exists because of the many questions teachers ask about the plan and their expressed reactions.

Value of Lay Committees Overestimated

If an evaluation is made by professional experts, I would take exception, at least in part, to Dr. Hamlin's criticism of the ability of these outside experts to

find out the things they need to know. Dr. Hamlin suggests that the members of the local committee be composed entirely or in part of farmers, class members, and administrators. We have always had this type of evaluation. The community judges each one of its servants; doctor, minister, or teacher. Some teachers get along well and are very popular for many years with only a mediocre program. I like to feel that a program of teaching vocational agriculture is near enough to a true profession that only professional people can evaluate its true measure of effectiveness. Of course, the opinion of lay people must be carefully considered and weighed by the professional evaluators. I have little doubt as to the ability of these outsiders to get a truthful picture of the situation if they take the time to do it.

The value of the local, lay committees, boards of education, or school administrators in formulating the objectives and planning the policies to be adopted and carried out in a program of vocational agriculture has been grossly exaggerated. Such advisory boards are often very helpful in executing and administering certain phases of the program. Every wide-awake teacher of agriculture has certain key men in his community to whom he goes for advice, suggestions, criticisms, and aid in operating certain phases of his program. The fact that they are or are not members of a specifically named committee is of no consequence. Very few constructive ideas or workable plans have originated in an advisory committee. They were the teacher's ideas and he got the committee to help him make them work, or to point out their weaknesses, as the case might be.

Oftentimes the local advisory board may misunderstand its function. A state teacher trainer told me of this extreme case which illustrates the point. A farmer drove approximately one hundred miles to the state university and was finally directed to the teacher-trainer's office where his opening remarks were that he had been appointed to the advisory board of the agriculture department in a certain school. Not being very well versed in such matters he had come to the state university for advice and the chief item on which he wanted advice was the textbooks that they should use in the agriculture classes.

Teachers Must First Desire Evaluation

Local committees, under various nomenclatures, have been of material benefit to the most efficient operation of part-time and evening classes, local fairs, and co-operative projects. However, for the most part, we are just kidding ourselves when we contend that the plans for such enterprises originated with the committee. The younger teachers may profit by a general advisory committee but I have noticed a tendency of the older teachers to not work so much with an especially appointed committee as to follow the practice of seeking advice from key men in their community with-

The Wisconsin Plan for Bulletins

IVAN G. FAY,
Teacher Education, Madison, Wisconsin

TEACHERS of agriculture are generally agreed that the most valuable reference materials at their command are bulletins from their own state experiment station. In certain fields, particularly animal husbandry subjects, bulletins from the U. S. D. A. are very useful, but teachers in any state invariably prefer bulletins from their own state college of agriculture. State bulletins are specific. They are descriptive of varieties, soils, and cultural practices, of feeding, housing, and sanitation programs that have been proved superior for that particular state. When a class is studying any unit of work on which a state bulletin has been written, a teacher usually feels that there is an emphatic need for one copy of that bulletin for each boy to study. When that unit of work has been completed, these bulletins are collected and filed on the reference shelf with solicitous care for use the following year.

Origin of the Plan

Years ago when departments of vocational agriculture were few in number and their enrollment small, the college of agriculture in Wisconsin very gladly supplied departments with whatever number of bulletins were requested. It was appreciated that few bulletins served a more vital use than those that were studied in high school by successive classes of future farmers. However, as the demand for bulletins doubled and redoubled with the addition of new departments, it became increasingly difficult and finally quite impossible for the college to supply the needed number of bulletins. In recent years it became necessary to limit to five the number of any new bulletin that could be given to

any department. With 224 departments of vocational agriculture in the state with an average enrollment of 50 or more, and with a large number of departments enrolling from 75 to a high of 148, it was obvious that their vital need for state bulletins was not being met.

Modified by many valuable suggestions from Professor J. A. James, Chairman of the Department of Agricultural Education of the Wisconsin College of Agriculture, and endorsed by the dean of the Wisconsin College of Agriculture, a plan suggested by the writer was put in effect last April that is adequately supplying the bulletin needs of all co-operating departments for all new or revised bulletins as they are issued.

How the Plan Works

Under this plan all new bulletins, or reprints or revisions of old bulletins are submitted in proof form to a committee of teacher-trainers, consisting of J. A. James of the College of Agriculture, Ivan G. Fay, and C. H. Bonsack of the State Board of Vocational and Adult Education, before the printing order for any given number of copies has been decided upon. This committee studies the bulletin and classifies it according to its value to teachers of agriculture.

Mimeographed circulars, reports on research, defense, and others are classified as "D" bulletins. One copy of each "D" bulletin is sent free to every department.

"Class C" bulletins are those with limited general value tho important in a few communities, such as bulletins on cabbage growing or strip cropping. One copy of "Class C" bulletins is sent free to every department. In addition, any

teacher may write the college requesting four more free copies should he wish for them, and should he desire yet a larger number he may purchase them.

"Class B" bulletins are those of general interest but on subjects not considered of major importance in the agricultural curriculum. Five free copies of each "B" bulletin are sent to every department in the state, and should the instructor desire a larger number he may purchase them at cost price by individually ordering them directly from the college.

It is with "Class A" bulletins that the new plan is effective. These are the bulletins of supreme teaching value—bulletins on corn and grains, on poultry, sheep, swine and dairy cattle, on feeding methods, fertilizers and soils, on orcharding and fruit growing. Every teacher wants a copy of such bulletins for each boy. The school demand for each "Class A" bulletin runs into the thousands, a number quite obviously impossible for the college to supply from its own budget.

A study of printing costs of such bulletins showed the following figures:

8-page bulletin—about 3 cents
16-page bulletin—about 4 cents
24-page bulletin—about 5 cents
more than 24 pages—proportionately

Each teacher who wished to participate in the new plan for supplying adequate numbers of "Class A" bulletins registered with Prof. James the number of each issue of such bulletins that he desired—10, 15, 20, 25, or any larger number that was a multiple of five. He also drew on his school board and deposited with Prof. James \$2.50, \$5.00, \$7.50, or \$10.00, according to the size of his standing order. Prof. James thus had a collective standing order for Class A bulletins running into the thousands, together with the cash to pay for the order.

When the proof of a new bulletin is examined by the committee and adjudged a Class A bulletin, Prof. James superimposes the standing order from departments of vocational agriculture on the number regularly printed by the college and has the money at hand to pay for it. The college supplies five free copies to every department of vocational agriculture in the state; then to every school which has made a deposit and has a standing order is sent the additional copies desired. From each school's deposit is then deducted the cost of the additional copies. When approximately 75 percent of the deposit made by a particular school has been used, that school is so notified by Prof. James and an additional deposit is made.

Reactions to the Plan

This plan has met with enthusiastic support by vocational teachers. Out of 224 departments of vocational agriculture, 206 have made their deposit and are regularly receiving whatever number of copies of new or revised bulletins they have asked for. In addition, there are 18 non-federally aided high schools having classes in agriculture that are participating in this plan. Since this plan became effective last April, the co-operating teachers have received:

15 Class D bulletins 3,960 copies distributed
7 Class C bulletins 1,848 copies distributed
9 Class B bulletins 11,880 copies distributed
7 Class A bulletins 27,160 copies distributed
Total 44,848

(Continued on page 131)

out making any fuss about it.

On the premise, already stated, that for evaluation to be most effective it must be desired by the teachers, it naturally follows that teachers themselves must be sufficiently interested in self-improvement to be desirous of having their program evaluated. This will require tactful leadership by supervisors of vocational agriculture. There must be an educational campaign among the teachers. The evaluation standards are not needed by supervisors to determine whether a teacher is doing a satisfactory job. Experience and skill make the task rather easy for a good supervisor.

Unfortunately, there are some teachers of agriculture who need to be prodded. It is a well recognized fact that there are many teachers of agriculture who have not made the effort necessary to work out a satisfactory program of work. Supervisors may be forced to take measures for bringing about an improvement, and the evaluation yardstick may have to be used as the prod in such cases. Such a use of evaluative standards should certainly be restricted, if not abolished.

There is little doubt that an evaluation will indicate the weaknesses. I believe there are statistics that will prove this to be true, but the following incident

illustrates the point. After the evaluation committee had discussed the results of their work with one teacher's program he was heard to remark good-naturedly, "I knew there were some very definite weaknesses in my program but I didn't think anyone else could find it out so quickly."

Dangers to Be Avoided

As the evaluation program is now set up there seem to be two or three dangers ahead. First, will these standards be kept up to date by the Federal office of vocational education or by A.V.A. Research Committee? Second, will expert evaluators be available who can do this work for each state? Special funds and adequate time must be considered. State leaders cannot be expected to place this additional task on men already engaged in full-time employment for other types of work. Finally, is this just a "passing fad" and will we have forgotten all about evaluation standards within five years? We shall see.

¹Mr. Hayden is now on leave of absence for one year completing work for his doctorate in Rural Education at Cornell University, Ithaca, New York.
²Reference is to a series of articles written alternately by Dr. H. M. Hamlin of Illinois and Dr. Ray Fife of Ohio, and appearing in the May, July, August, and October issues.

Supervised Practice

C. L. ANGERER

Suggestions for Selecting and Planning Production Projects

KERMIT J. PETERSON, Teacher,
Alexandria, Minnesota

SUPERVISED farm practice is accepted as the heart of our program in training boys for farming. The prime importance of these experiences dictates that realistic and appropriate bases be used in the selection and planning of the boy's farming activities. Such bases include the real interests, abilities, and needs of the boy, the needs of the home farm, the present and potential opportunities for learning, particular emphasis given to dominant types of farming, and prevailing practices in the community. This discussion offers a method of planning farm practice with particular emphasis given to dominant types of farming and the needs of the home farm.

At Alexandria, we consider first the types of farming in the area. What are the major enterprises in the area? What are the reasons for their importance? Should other enterprises rightfully hold places of greater importance in the farming area? Are the present methods of managing these major enterprises below average, average, or above average? What changes can be made to improve the farming situation in the area and increase the farm earnings?

If we have these questions in mind when we help the boys plan their individual farm practice programs, a more logical and practical program will be developed. If dairying, hogs, and poultry are the major livestock enterprises in the area then, according to farm management surveys, those farms having dairying, hogs, and poultry as their major enterprises have the proper choice of livestock. This also holds true for the selection of crops. In other words, the crops and livestock predominating in an area are generally there because they have been found to be the most profitable.

Under some circumstances it may be more profitable for a farmer on his particular farm to have a different selection of crops and livestock than predominates in the community. Such conditions are common because of the many factors such as type of soil topography of the land, quality of the land, size of the farm, capital available, and special markets which influence the choice of crops and livestock.

Farming Area Described

Generally, it is well to raise products for which there is a good market outlet in the community. If, for example, potatoes and rutabagas are not raised in the area to any extent it may be difficult to get large enough quantities together for economical transportation to market. Thus, transportation costs may be so high as to make the enterprise unprofitable even if the farm is well fitted for its production.

In the Alexandria community the major enterprise is dairying. Next in order of importance are small grain, corn, poultry, hogs, and beef cattle. The common practice of crossing beef and dairy cattle has resulted in a lowered production of the dairy herds and in a correspondingly lowered net farm income. The quality of dairy cattle is not high, few herd records are kept, and the practice of using purebred dairy bulls is not as extensive as it might profitably be. There is much room for improvement here, as well as in the poultry and hog enterprise.

The soil ranges from a heavy clay loam to a light sand loam with sandy loam predominating. The topography ranges from quite hilly to comparatively level land. Most of the land, however, is slightly rolling. As yet erosion is not a serious problem altho on some of the hilly land a small amount of erosion is taking place. There is in this area quite a variation in the size of farms, some of them being quite large and others quite small, the average being about 150 acres. Corn is becoming more important each year as new, higher yielding hybrids are introduced. Since there is no shortage of calcium in the soil, alfalfa and sweet clover are raised on most farms. Pastures are generally poor in mid-summer but more farmers are turning towards supplementary pastures to prevent this. Beef production is increasing in the area due to the high prices being paid at the present time for beef products. The quality of beef, however, is generally quite low as both poor cows and poor bulls are used.

More time will be spent this year on the collection of data pertaining to the types of farming, size of farms, selection of crops and livestock, acres of crops and number of livestock per farm, yields and value of crops, and the production of livestock in this area. These data will be useful in planning and improving the farm practice program.

How Needs Are Determined

After familiarizing oneself with the area as a whole, the next step is to study and determine the needs of the individual farm. These needs can best be determined by surveys, by farm records, by farm maps and by personal visits to the farm. When surveys are used, these surveys can be analyzed and compared with those of other farms in the community. By so doing present farm weaknesses may be brought to light. In Agriculture III and IV, and perhaps in Agriculture II, farm business records should be kept by the students. If such farm records are complete, they may be compared with each other and also with the farm account records kept thruout the state.

Here again present weaknesses may be brought to light. A map of the farm indicating the fields, pastures, meadows, swamps, and hills will also be very helpful since these factors determine to quite an extent the type of livestock and crops which can profitably be raised. The following devices are useful in determining the needs of the individual farm:

1. Farm surveys
2. Farm records
3. Personal visits by the teacher
4. Farm maps
5. Agricultural data on major enterprises in the area and on factors determining the success or failure of farmers.
6. Soil and topography maps of the area if they are available
7. Market outlook data
8. Personal data of the operator's and student's likes and dislikes

Criteria for Selection of Projects

After these needs have been determined, the next step is the actual selection of the projects. Criteria which are useful in the selection of projects are:

1. Type of farming in the community and on the home farm
2. Possibilities of home farm improvement
3. Attitude of the boy's parents
4. Financial status of the boy and his parents
5. Boy's likes and dislikes
6. Abilities and experience of the boy
7. Probable financial returns
8. Equipment, land, and feed available
9. Educational value
10. Aid in establishment in farming

In Agriculture II, III, and IV, long-time farm practice programs will be developed by the boys. In Agriculture I, selection of projects which will later fit in with the long-time plan will be attempted, but no extensive long-time program will be made at this time. Generally speaking, selection of projects will be made in the fall of the year and planning will be started at once. So far as possible informational content will be introduced near the time the farm practice jobs are to be performed and experienced.

The boy's real goals and interests, his recognition of personal needs, and his level of experience and ability must be considered in the selection and planning of his farming program. Failure to consider these factors simply invites needless difficulty. Motivation can become a serious and constant problem. In most cases, the degree of pupil interest determines the success or failure of any phase of the boy's program. To gain and hold the continuing interest of adolescent boys is no simple task, and it requires the use of strategic techniques and careful planning by the teacher. Some of the methods of motivation are as follows:

1. Review outstanding programs of older boys
2. Point out the opportunities for making money
3. Point out the opportunities for accumulating foundation stock

4. Conduct a farm practice tour
5. Visit outstanding programs of neighboring departments
6. Visit the most successful farms in the area
7. Study the farm practice programs of the State Farmers
8. Use other F.F.A. influences
9. Give F.F.A. recognition for the outstanding farming programs for the year

The next step after the selection of the projects is the planning of the projects. The following suggestions on planning production projects are herewith submitted.

Planning Production Projects

Teachers of vocational agriculture have an important responsibility in developing a type of farm practice program in which modern up-to-date and economical practices are followed, in which accurate records are kept, in which interest and pride in doing a job right are developed and educational and financial returns realized. This is not always an easy task. If it is to be accomplished it becomes necessary for each student to make definite and complete plans for each of his projects. This is an extremely important step, for without good plans the chances of success are minimized and as a result the whole farming program may be a failure. Each individual project must be so thoroly planned that by following this plan step by step the project will be brought to a successful conclusion.

The following pattern for production project plans was developed to help the teacher to guide the students to make good plans. Such pupil plans possess three specific values.

First, with the completion of his own prepared plan the student is able to proceed step by step on his own initiative to gain the desired learnings and to realize his personal goals.

Second, by following this outline the student will necessarily come in contact with those approved farm practices pertaining to his project. For example, by following the outline the student will learn how each step should be done before he plans how he is going to do it.

Thus, before the student decides how he is going to start his beef calves on feed he must know how beef calves should be started on feed. This is one of the most important parts of the plan because after the student learns the best and most profitable procedures to follow he will generally follow them, limited of course by his home-farm situation.

It is true that this method of approach involves some repetition; however, the amount of repetition is not so great as to be too time consuming and it must be remembered that repetition is one of the methods by which we learn. It will also be noted that the student is not only asked how he is going to finance his project, but he is encouraged to experience the various means he could use to finance his project. This involves a much broader and more extensive study of the field of finance. The student not only learns more about financing in general but he may find that some other method of financing his project would be more satisfactory than the one he had already chosen.

Third, by following this outline the student learns both the value of planning and the techniques of planning. He becomes mindful of the fact that before a

production project or a farm enterprise is started the probable financial outcome must be considered and he also becomes familiar with those factors which determine the outcome or success of the project. The student who learns both how to plan and the value of planning will, in all probability, make extensive and profitable use of this knowledge thruout his life.

The outlines for all production projects cannot be included in this article. Most of them can quite easily be formulated along the same pattern as suggested here.

Project Planning Outlines

1. Why have you chosen this particular project?
2. What is the market outlook for this project you have selected?
3. At what time of the year are the highest prices generally received for market hogs?
4. What is the most desirable weight at which to market hogs?
5. At what time of the year will it be necessary to start a sow and litter project if it is to be marketed at the most desirable weight and when prices are the highest?
6. When are you planning to start your project?
7. If your project is started at this time, when will it be ready for market?
8. What breed have you chosen—why?
9. Where will you get your brood sow or sows of this breed?
10. What things should be taken into consideration in selecting a brood sow?
11. How are you going to select your brood sow or sows?
12. How are you planning to finance this purchase?
13. By what other methods could you finance this purchase?
14. How should a brood sow be fed and cared for before she farrows?
15. How are you going to feed and care for your brood sow or sows before farrowing?
16. How should the brood sow be fed and cared for during farrowing and immediately following farrowing?
17. How are you going to feed and care for your brood sow or sows during and immediately following farrowing?
18. How should the sow and pigs be fed and cared for from farrowing time until six weeks after farrowing?
19. How are you going to feed and care for your sow and pigs from farrowing until six weeks after farrowing?
20. How should market pigs be fed and cared for after weaning to make the most economical and profitable gains?
21. How are you going to feed and care for your market pigs after weaning?
22. How should the sow be fed and cared for during and after her pigs are weaned?
23. How are you going to feed and care for your sow or sows during and after her pigs are weaned?
24. How should good breeding gilts be selected?
25. How will you select your breeding gilts?
26. How should breeding gilts be fed and cared for until they are bred?
27. How are you going to feed and care for your gilts until they are bred?
28. How much feed are you going to need for your complete project and about how much will it cost?
29. What important diseases and para-

sites affect hogs in this area and how can they be controlled?

30. What precautions are you going to take in order to keep your hog herd free of these diseases and parasites?
31. What additional buildings and equipment will you need to carry out your project as planned? (Plans of buildings and equipment should be inserted here.)
32. Will all the profits you make on your project be your own? If not, how will it be divided?
33. How are you going to determine how much profit you will have made from your project?

Crop Project

1. What crop have you selected for your project?
2. Why have you chosen this project?
3. What is the market outlook for your crop?
4. On what type of soil, how much rainfall, and at what temperature does the crop you have selected grow best?
5. What is the average temperature and rainfall in this region?
6. On what type of soil are you going to raise your crop?
7. What fertilizers are needed on this type of soil to make this crop grow most abundantly?
8. What fertilizers are you going to apply? How much per acre?
9. What is the most satisfactory method of selecting seed?
10. How will you select your seed?
11. How is it possible to determine whether most of the seed will germinate or not?
12. How are you going to determine the percentage of germination in your seed?
13. What type of seed bed is needed for this crop?
14. What kind of a seed bed will your crop have?
15. What diseases and insects may damage the seedlings of this crop? How can they be controlled?
16. What precautions are you going to take to prevent your crop from being damaged in the seedling stage by diseases and insects?
17. When, how deep, and how much seed per acre should be planted to get the greatest yields?
18. When, how deep, and how much seed per acre are you going to plant?
19. How much cultivation will this crop require for the best results?
20. How often and how deeply are you going to cultivate your crop?
21. What type of storage is necessary for this crop?
22. Where will you store your crop?
23. When and where are you planning to market your crop?
24. When is the highest market price generally paid for this crop?
25. How much money will you need to carry on this project? (Include cost of seed, cost of land, cost of power, cost of storage space.)
26. How are you planning to finance this project?
27. By what other methods could you finance this project?
28. Will all the profits you make on your project be your own? If not, how will they be divided?
29. How are you going to determine how much profit you will have made from your project?

J. B. McCLELLAND

Farmer Classes

O. C. ADERHOLD

Some Fundamental Considerations in the Placement of Young Men on Farms*

BARTON MORGAN, Teacher Education, Ames, Iowa

THE placement of agriculturally trained young men on farms is one of the new responsibilities assumed by teachers of vocational agriculture. This responsibility has now become a patriotic duty because of the new demands upon agriculture for producing food with which "to win the war and to dictate peace."



Barton Morgan

In this article the author wishes merely to call attention to certain fundamental assumptions and general principles without much elaboration. It does not seem necessary to go into detail because most of the points are easily understood and are generally accepted. It is hoped, however, that the statements do not appear to be more dogmatic than the facts now available on the subject would justify.

Fundamental Assumptions

Some of the fundamental assumptions relative to the placement of young men on farms are:

1. That a complete program of vocational education in agriculture consists of the following steps: (a) guidance, (b) training, (c) placement, and (d) follow-up.

2. That more attention should be given to placement in the future than in the past, altho it is likely that we should continue to place major emphasis on "training." Placement, however, is important, and something significant can be done about it.

3. That under our present plan, or lack of a satisfactory plan, of selecting trainees, we should not expect to place all of our students on farms. Studies indicate that about 52 percent of our trainees at present are on farms. If we can improve our programs of both guidance and placement, we will be able to raise our batting average for placing men on farms. However, those who go into related work should not be considered as lost to the cause of agriculture, and their training should not be considered as wasted.

Conditions Not Under Control

There are certain conditions outside the direct control of teachers that must be taken into account in attempting to place young men on farms. Some of these are:

1. The amount of money required to get a start in farming is a serious problem. State and national policies relative to agriculture have a bearing on getting young men established on farms. Some

of these, as you know, are farm credits, homestead tax exemptions, mortgage moratoriums, crop control, trade barriers, etc. The teacher and the trainee should give thought to these things altho they cannot change them much, if at all. A more important consideration is the economic status of the boy's father, the number of sons, and the relationship between the father and the son.

2. The immature age of the graduates of the day-school classes is likely to be a handicap. They usually lack the managerial ability needed to handle a farm alone. Perhaps it would be well to arrange some kind of apprenticeship to round out their training and give them time to mature. The average farm in Iowa a few years ago was capitalized at a larger amount than many of the small banks; it is too much to expect a boy to become the sole manager of a modern farm without any guidance.

3. The situation of the farm laborer, the hired man, who is found on 4.2 percent of all farms, is such as to make it a doubtful starting point for farm ownership, or a satisfactory career in agriculture. The wages are low, the tenure insecure, and the chances for advancement poor. Such employment may be a good experience if a young man can work for a superior farmer and if he does not stay with that kind of work more than three or four years.

Points to Observe in Placing Young Men on Farms

The teacher of agriculture should avoid any attempt to persuade a boy to take any particular farm. He should provide as much information as he can but leave all decisions to the boy and his financial supporters.

Teachers should encourage the young man in search of a farm to think thru the whole proposition carefully. This may provide an excellent teaching situation.

We must avoid most carefully encouraging a young man to take on too large an undertaking until he has had time to mature and gain more managerial ability. It is no kindness to anyone to be placed in a situation where the odds against him are too great. In industry, the new men do not start out as president of the company. They usually begin at or near the bottom and work up. General Electric, for example, has a period of training thru experience for the college graduates that it employs.

Lease Important

If a young man chooses to rent a farm, we should encourage him to study his lease very carefully. The present demand for farms is tending, in some places, to cause the landlords to ask too much. The

Economics Department of Iowa State College has worked out an equitable farm lease. This may be secured by writing for a copy.

Teachers of agriculture should be concerned with the type of people who are to live on the farms in the future. The total net migration from farms between 1920 and 1930 was 6,300,000, of which about 2,000,000 were youth between 16 and 24 years of age. In the Cornbelt from $\frac{1}{3}$ to $\frac{1}{2}$ of the people born on farms are not needed to maintain the present working force in agriculture. The quality of those who stay must be kept high. Perhaps the placement program can be directed toward this end. There is need, however, for those in the field of vocational education in agriculture to give thought to the needs of the farm boys who will leave the farm.

Implications of the Placement Program

Young men who are attempting to establish themselves in farming need training as much or more than at any other time. This emphasizes the need for part-time and adult classes to parallel the placement program. This training should include that which will make agricultural statesmen as well as technicians.

There is need for more research in the field of placement, but research alone is not enough; it must be implemented.

The problems of young men getting established in farming may well be taken into account in planning day-school and part-time programs. A study of the problems encountered by young men in getting established in farming is nearing completion at Iowa State College. The study is being conducted by Messrs. Starrak and Dobervich, and will be published by the Experiment Station. The larger and more difficult problems, as revealed by this study, are:

- Financing the establishment in farming
- Securing land
- Production problems and techniques
- Providing adequate housing
- Securing livestock
- Management, marketing, help
- Securing equipment

Summary

1. The placement of young men on farms is a part of a complete program of vocational education in agriculture and more attention should be given to it.

2. There are a number of conditions that make placement difficult. Among these are the shortage of farms, the cost of getting started, and the immaturity of the student.

3. In placing young men on farms, there are certain principles and precautions that should be observed. Placement should be closely related to guidance.

4. The placement program has definite implications for the day-school and part-time programs.

*This article includes material presented by the writer at the Agricultural Education Section Meeting at San Francisco, December 18, 1940.

Supervised Farming with Adult Groups

C. L. WILKINS, Teacher, Syringa, Virginia

THE average high school schedule and program of studies are planned and conducted in such a way that most teachers of vocational agriculture find it difficult to carry out a satisfactory supervisory program with adult-farmer groups. Where there are too few teachers with a heavy schedule, there is a tendency to turn extra school activities over to vocational teachers.



C. L. Wilkins

Since this adult group is in the majority, as is shown by national and state figures, and since the Smith-Hughes Law specifies that we teachers are to work with men already engaged in or established in farming, I believe that none of us can afford to leave them out of a well planned and organized program.

I have found that principals, members of the school board, and divisional superintendents are a great help in formulating a satisfactory schedule. They have been able to promote this part of the program thru developing among staff members an understanding of the vital importance of this phase of our work.

Time Needed for Adequate Supervision

After 12 years of experience, I have come to the conclusion that at least three afternoons per week are absolutely necessary for supervisory work on the part of the instructor if he hopes to accomplish worthwhile supervised practice with part-time and adult classes. This has been made possible to a great extent in the two-teacher schools, but the great majority of our departments are still handled by one man.

Four purposes of this adult-farming program receive rather general approval by teachers: (1) to improve farm practices; (2) to increase production of both crops and livestock; (3) to introduce new enterprises; and (4) to encourage co-operative activities. If we will but consider and analyze any of these purposes we will have to agree that all of them require not only careful planning but careful supervision as well. The planning is done in organized discussion groups and the supervision calls for much time to be spent with the individual co-operators in the field. I imagine that is why we have changed our terminology from "evening classes" to "supervised farming with adults."

Personally, I have never been able to evaluate my work with adult groups among whom there was nothing more than a discussion of improvement of farming practices. There are so many needs in most of our farming communities that if the instructor will take one or two of these as a central goal for his program, I believe his accomplishments will be much greater. This will be especially true if he can get the co-operation of a representative group and sell them the ideas. After he gets this guiding force the

improved, or new farming practices will become vital.

Experiences With Tomato Growers

Farmers in our community were recently urged to grow early-wrapped tomatoes, as well as the late-canning crop that is normally produced. Naturally many were skeptical, and there was some objection on the part of a few canners, but finally a group was called together and about 30 men decided to try out the scheme. This new enterprise required at least a half dozen meetings. We had to decide how to produce or secure early plants in place of the usual open-bed plants. A discussion of the most popular varieties was necessary. Securing the plants from Georgia growers economically made it necessary to buy a truck load of plants. These plants were purchased co-operatively. Other problems that had to be worked out had to do with the time to have our plants arrive from the south; whether to set plants in the open or to protect them with hot-caps; the stage of development to pick the fruit; and practices having to do with grading, packing, and marketing our product.

Attracting Low-Income Farmers in Adult Classes

E. M. PENINGTON, Teacher,
Mineral, Virginia

FOR seven years adult classes in agriculture in Louisa County, Virginia, have been conducted by conference procedure. During this time 10 classes have been organized and conducted, but in most cases the results have been rather discouraging. Farmers in Louisa County, for the most part, belong in a low-income class. The few whom I have been able to interest in the adult classes were the more prosperous and up-to-date farmers. They were farmers who are making a good living, and will continue to keep up with better farming practices without the help of the adult-farmer class. My problem has been to find a way to get those farmers into such a class who are not making a decent living. For the most part they are uneducated. They still rely to a great extent on superstition in working out their farming programs.

When I visited these low-income farmers they have very frankly discussed their farming problems. In some cases I have been able to get them to agree to join the class, but they have not come for long. They just do not seem to fit. They are embarrassed, and will not talk. Very few will discuss or bring out problems that are bothering them. The result has been that very soon the class dwindles down, leaving only a few attending, and those who need the information most are gone.

Farm Shop Attracts Them

I personally visited 45 farmers last fall from a section in one end of the county,

It might be well to note here that since this enterprise was started three years ago, the canneries have all found that they have been better off rather than injured by the venture. Yields have been 25 to 30 percent higher with earlier set plants. Canneries have been able to open earlier in spite of the fact that the first pickings were sent to market as "green wraps." The difficulty in securing local plants has also been alleviated.

The evening discussions having to do with this project were stimulated more by the absence of local practices and the necessity for the latest in improved practices than is the case in well-established enterprises where it is so hard to evaluate results obtained with discussion groups.

There are still so many needs in any farming community which adult groups alone can work out that many will maintain the so-called evening class is our most effective medium. These needs may include the following: Better, rounded-out programs are needed on all farms; new crops and enterprises could well be adopted in many localities; co-operative activities such as canneries, creameries, hatcheries, storage houses, and marketing services are needed and census reports show that most farmers must increase our yields for profitable returns. For the quickest and most effective results let us not neglect our colleagues who are already in the business of farming.

and in each case explained to them that I was opening the school shop to them each Thursday evening in the week. It was pointed out that all of the shop equipment would be available to them, and that they could come in on any Thursday night, bringing any piece of farm equipment with the idea of repairing it.

Results were gratifying from the very first. Farmers whom I had never been able to get into our adult class came, bringing small farm implements such as tools that needed new handles or saws to be sharpened. The class was very informal. The members soon began to have a good time. As time went on larger machines such as manure spreaders, mowers, lime spreaders, or disks were brought in, and several farmers joined together in repairing the larger implements. When a farmer took a repaired mower home he felt that his time spent in the shop had been worth while. He could see where he had benefited.

Importance of Informality

None of the teaching was formal. Whenever it became necessary for the members to use equipment with which they were not acquainted, such as the electric or acetylene welder, I would demonstrate its use to the group.

In this type of farm-shop class there is ample room for good teaching on farming practices. One night there were five or six men working on a lime spreader. While we were all working around it we naturally discussed how to operate it, how to set it, and how to care for it. From this a discussion ensued on the results derived from liming the soil. The three or four farmers who used lime proceeded to relate their results. Questions were asked, and as a result two farmers who had never used lime before applied it on their farms this spring.

L. B. POLLOM

Farm Mechanics

A Farm-Shop Cleanup Plan

ROY A. OLNEY, Teacher Education, Ithaca, New York

ONE phase of good farm-shop procedure in teaching high-school boys is to have each farm-shop class clean up and leave the shop room and equipment in a neat and orderly arrangement. If properly planned and organized it should not consume more than five minutes of time. Some plan for doing this will relieve the teacher of doing the work, or of the embarrassment in making explanations if visitors should stop at the farm shop when the room is dirty and disorderly. One suggestive plan for the teacher to use follows.

At a given signal by the teacher, near the end of the shop period, each individual boy is responsible for his own shop project. He must collect and see that it is stored in the proper place before the cleanup of the shop is started. In the meantime, or before, the teacher has adjusted the "name dial" on the "duty indicator" by which every pupil is automatically assigned a certain duty to perform. From this point the pupil designated as the "general foreman" is in charge of the whole cleanup job. Responsibility is placed directly upon the foreman to see to it that every detail of cleanup is performed by the proper pupil assigned for that particular day. With this responsibility the foreman is given authority to hold the pupils until everything is attended to satisfactorily. Each pupil has, in this way, a definite assignment. The foreman may give or appoint boys to a job when another boy is absent, or when additional help is necessary.

How the Plan Works

Two things are essential to this farm-shop cleanup plan:

First: A *duty chart* that outlines the work which the teacher desires to have done in this shop so that it will be left in good order. Such a chart of activities will vary according to the situation and the teacher. This duty chart should be adjacent to or near the *duty indicator*. A suggestive sample duty chart follows:

Farm-Shop Cleanup Activities

General Foreman: Responsible for the whole cleanup job. All boys work under him. May give or appoint boys to a job when another boy is absent or additional help is necessary. Approves work of the following groups. Excuses class when all jobs have been completed satisfactorily.

Tools: Pick up all tools used in the shop jobs and place them in their proper storage space.

Benches: See that all benches and working surfaces are clean and in order. See that forge is properly cared for. Take care of paint and paint brushes.

Supplies: Pile lumber, iron, and other supplies in their proper place. Put scraps

in scrap box. Store nails and bolts.

Sweeping: Sweep thoroly, around walls, in corners, and behind construction. Replace brooms in their proper place.

Windows: Adjust shades, close and bolt windows and doors. Replace and arrange movable equipment in its proper place.

Duty Indicator

Second: "*Duty indicator*" (see Figure 1) is composed of two parts, names of cleanup duties and name dial of pupils in the shop class. It is prepared as follows:

1. On a heavy piece of cardboard, approximately 14x14 inches, draw one circle in the center, 12 inches in diameter.
2. On another piece of cardboard,

permanently to a piece of light lumber and place the name dial on this larger piece of cardboard so that it will be movable. Make the name dial temporarily secure while lines are drawn from the center point thru the points laid off with the protractor to the outside edge of the larger circle. Place the names of the boys on smaller movable circle. See Figure 1 for method of writing names to make the reading of them easy.

4. Names of duties (from *duty chart*) are placed in the sections of the larger circle. It may be well to duplicate most cleanup duties and even triplicate the more important ones so that enough help is provided to do the work quickly and efficiently.

5. It will be best to prepare a *duty indicator* for each farm-shop class in any given year. During the next year if there are classes of the same size as the previous year only the *name dial* will need to be prepared to have the *duty indicator* function.

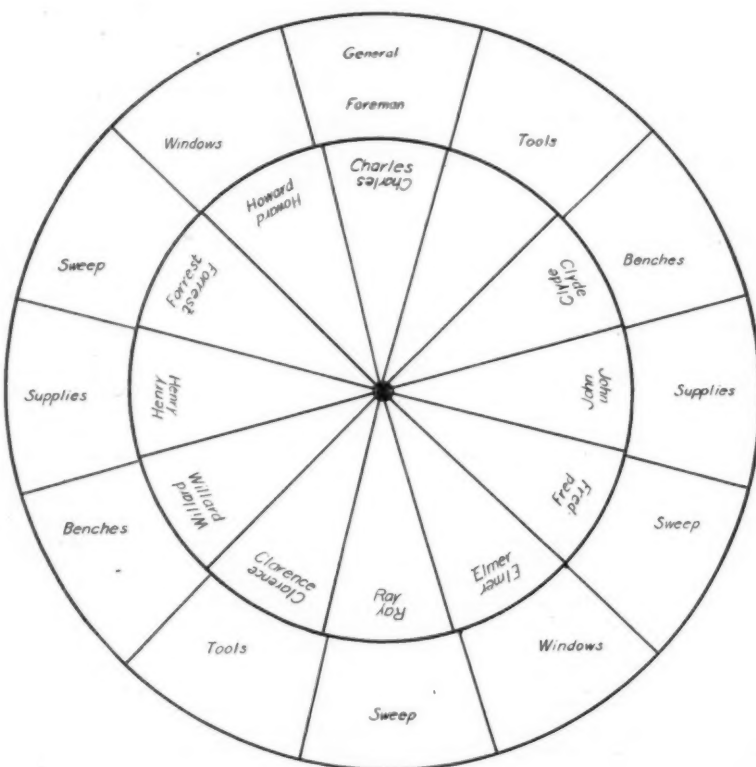


Fig. 1—The Duty Indicator

draw a circle eight inches in diameter and cut out this circle. With a protractor on the cut-out circle, lay out the number of divisions necessary to take care of the names of the boys in the class. This will make the name dial.

As shown in Figure 1 there were 11 boys in the class, 12 spaces were provided for, leaving one blank, which does no harm.

3. Attach the larger piece of cardboard

6. It is well to have all lines and names done in India ink.

Moving the *name dial* one space changes the duties for each pupil and thus provides variation in this work. By this process of rotation, the boys will become better acquainted with the place where the tools, supplies, and equipment are kept and it is hoped that it will also train them to keep their own home-farm workshop in better condition.

Livestock Weighing Crate for Students of Vocational Agriculture

JOYCE W. MILLER, Department of Farm Shop Practice and Methods,
Kansas State College, Manhattan

MOST students of vocational agriculture are guessing the weights of livestock they own and on which they keep records. Many times these guesses are far from the actual weights of stock. Boys may not be aware of the cost of gains, rate of gains, or feed cost of a pound of gain. Too often boys sell stock without weighing and are not sure whether or not they receive enough money per pound or whether a profit is made.

Objectives

A weighing device should be available on the farm of every student of vocational agriculture.

It will add interest to livestock feeding, make for accuracy in record keeping, make the farming program more profitable, and will provide a most worthwhile shop project. It may be used as an F.F.A. goal to correlate farm mechanics, farming program, classroom instruction, and F.F.A. The cost should be kept low enough so that every boy can build one.

Constructing Crate

The crate may be constructed of either new or used materials. The cost when using new materials, including two coats of paint will be about \$5. When used materials are secured, the cash outlay may vary from \$1 to \$3, depending upon the ingenuity of the student.

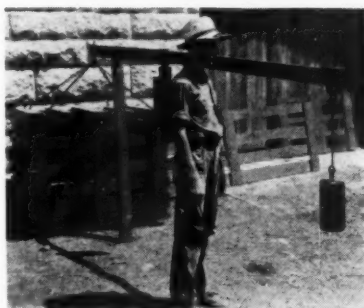
A crate four feet long, three feet high, and 2 feet wide will weigh hogs and calves up to 300 pounds. A fence post five feet high may be used to support the beam which may be a two by four or a channel iron from an old car. A solid post in the fence surrounding the corral or lot may be used, permitting the crate to be inside the lot and the weighing arm outside the

serve to cut down resistance when weighing. The beam should be 12 to 14 feet long, depending on the size of the crate.

A hook bolt in the end of the beam will serve to connect the chains which reach to the four corners of the crate to lift it off the ground. The bolt is placed 18 inches from the point of fulcrum. Two weights should be used, one for balancing the crate, and one for weighing the animal. Scrap iron, rocks in buckets, or specially made concrete blocks can be used for weights.

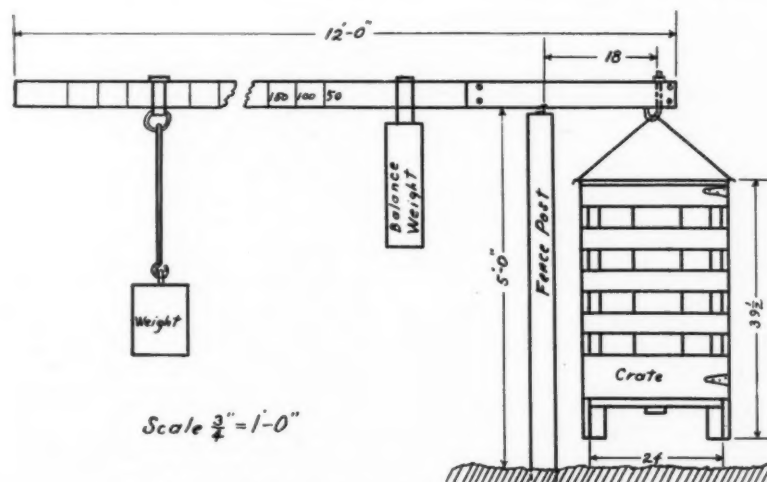
Calibrating the Beam

The beam may be calibrated by multiplying effort by length of effort arm, equal resistance by resistance arm. Known weights may be placed in the crate and marks placed on the beam when the load is balanced.



Weighing crate showing 305 lb. gilt being weighed. The weight nearest the crate balances the crate when empty

The crate has a door in either end, and may be left in the lot so that animals may run thru it to become accustomed



A practical, inexpensive weighing device

lot for convenience. A piece of angle iron on the post makes a satisfactory fulcrum, and rounded slots in the channel or irons bolted on the sides of the two by four will

to it. When one wishes to weigh one door can be closed, a panel used, and the animal driven in, weighed, and the weight recorded.

A Check List on OSY Training Courses

ELMER BELNAP, State Supervision,
Boise, Idaho

1. How many out-of-school youth between the ages of 17 to 25 are there in the local community?
2. In what courses are these youth interested?
3. Is my farm shop adequate to have both a defense course and my regular work? If not what steps can be taken to make it so?
4. What other buildings are available in the community that would be suitable for national-defense training courses?
5. Who are the expert tradesmen in the community who could be recommended to instruct the classes?
6. What additional equipment would be necessary to conduct the proposed course?
7. Could I make this new program fit in with my vocational training in such a way that it would be the logical place to keep it permanently?
8. Am I acquainted with the training offered and have I studied the outline of the courses?
9. How much of this training would I be qualified to teach?
10. What possibilities are there for me to qualify if need be?
11. How many adult farmers would be interested in these courses if the age limit were raised?
12. Are the local school officials informed about the courses offered and are they sold on the training?
13. What worthwhile projects can be supplied for the training jobs?
14. How much of my time could I profitably devote to aid in supervision of such courses?
15. To what extent might my experiences with these defense classes help me in planning my future program of work?
16. Would my efforts be reflected in better service to the local community in promoting vocational education?

Wisconsin Plan for Bulletins

(Continued from page 125)

It should be noted that all teachers have received free the Class B, C, and D bulletins and five each of the "Class A." They have been charged the cost price only of "Class A" bulletins asked for in numbers greater than five.

Those in charge of bulletin distribution at the college as well as instructors of vocational agriculture have been well pleased with the operation of this plan in the seven months since its inauguration. It is answering the problem of supplying teachers with needed bulletins in adequate numbers.

The well being of a people is like a tree, agriculture is its root, manufacturing and commerce are its branches and its life; if the root is injured the leaves fall, the branches break away, and the tree dies.

—A Chinese Philosopher

Studies and Investigations

C. S. ANDERSON

Problems Encountered by Young Men Trained in Vocational Agriculture in Becoming Established in Farming*

SAM DOBERVICH, Supervising Teacher in Agriculture, Lake City, Iowa

DURING the years 1938 and 1939 the writer interviewed personally 504 young farmers who had started farming for themselves since 1930. One hundred and fifty-seven of this group studied vocational agriculture in high school. This report is confined to the problems encountered in becoming established in farming by the 157 young farmers who have had instruction in vocational agriculture. These young farmers were interviewed in 50 of Iowa's 99 counties.



Sam Dobervich

Purpose of Study

The purpose of this research was to find how young men in Iowa became established in farming and what their chief problems and difficulties were. The major objective of this research was to give leaders in vocational agriculture a picture of what problems and difficulties young men encountered in becoming established in farming.

If the results of this investigation indicate accurately how young men who have had instruction in vocational agriculture become established in farming in Iowa, the instructors will be able to show their students the probable difficulties they will encounter, and thus help these young men to be better prepared educationally, financially, and personally to cope with their problems.

Some of the questions involved in this investigation concerning the problem of beginning young farmers is as follows:

1. What financial assets must young farmers have in order to become established in farming?
2. How does vocational education in agriculture help these young farmers to become established?
3. In what types of occupational experience do the young farmers engage after leaving school and prior to their establishment in farming?
4. How important is the factor of kinship in helping the young farmers to acquire a foothold in farming?
5. How is vocational education in agriculture evaluated by these young farmers in terms of its aiding them in becoming established in farming?
6. What factors other than education in agriculture help in establishing the young farmers, and what is their evaluation of each?

7. How long does it take young farmers in Iowa who have had training in farming to become established in farming after leaving school?

8. Are the problems encountered by young farmers in the different Iowa farming areas common to all areas? If not, in what respects do they differ?

land that didn't belong to any kin. Eleven boys obtained land from their uncles while 17 obtained land from grandparents, in-laws, and brothers. Thus 61 percent of these young men in getting established obtained land from some relatives.

Personal and Family Data

The ages of these young men ranged from 16 to 36, with the mean being 25 years.

One-hundred and thirty-six or 92 percent of the young farmers were farm-raised while only seven, or five percent were town-raised. Five, or three percent

Table I—The Number and Location of Farmers Interviewed

Areas	No. Counties in Each Area	No. Counties Sampled	Total No. Farmers Interviewed	No. of Farmers With Vocational Agriculture
Cash Grain.....	22	17	248	73
Western Meat.....	19	10	54	22
Dairy.....	18	11	124	54
Pasture.....	23	12	78	10
Total.....	82	50	504	159

Table II—Farming Status of 157 Farmers Trained in Vocational Agriculture

Status	Grain No.	Dairy No.	Meat No.	Pasture No.	Total No.	Percent
Tenants.....	48	29	15	9	101	64
Owners.....	6	8	5	1	20	13
Partners.....	8	6	0	0	14	9
Managers.....	2	9	0	0	11	7
Share Allowance.....	9	0	2	0	11	7
Total.....	73	52	22	10	157	100

The young men were considered to be established in farming if they were found to be in any of the following classifications:

1. Family member with definitely arranged remuneration from the farming enterprises.
2. Partner in farming enterprises.
3. Farm manager with full responsibility of managing farming enterprises and receiving wages or share income.
4. Tenant.
5. Owner.

The writer did not consider the following young men as being established in farming:

1. Family member with indefinite allowance or working for expenses.
2. Owner of single farm enterprise on the home farm.
3. Hired hand on the home farm.
4. Hired man away from home.

Farming Status

Sixty-six, or 42 percent of the young men farmed land that was owned by their fathers, while 63, or 39 percent were on

stated that they were both town- and farm-raised. Nine of the young men did not state where they were raised.

The mobility of these farmers from place of birth to their present place of establishment shows that they tend to settle down close to home. One-hundred and twenty-nine, or 82 percent of the farmers were farming in the same county in which they were born. Twenty-two, or 14 percent were farming in different counties than the county of their birth while five, or three percent were in different states, and only one was foreign born. Upon further investigation it was found that of the 22 farming in different counties, 18 were in counties adjacent to their home counties. These findings indicate young men tend to begin farming near home and also stay within farming areas with which they are familiar.

Eighty-eight, or 56 percent of the 157 young farmers were found to be married. The young men believed very strongly in selecting wives that were farm reared because 69 or 78 percent of the wives were born and raised on the farm. Fourteen, or 16 percent were town reared

while five, or six percent claimed both farm and town.

The wives' attitude toward farming was considered important by the young farmers. Eighty-four, or 96 percent of the wives were reported to have a fair, good, or very good attitude toward farm life.

The mean grade completed by the young farmer was 12. Eighty percent of them graduated from high school while 17, or 11 percent dropped out of high school before graduating. Fourteen, or eight percent had attended college but only one graduated.

Forty-seven, or 30 percent of the young men had four years of vocational agriculture in high school. Twenty-five, or 16 percent had three years, 61, or 39 percent had two years, while 24, or 15 percent had only one year. The mean was 2.6 years.

Of the different subjects in agriculture the number reporting each were as follows:

Subject	No.	Percent
Animal Husbandry	139	32
Crops and Soils	131	31
Farm Shop	95	22
Management	39	14
General	5	1
Total	429	100

The young farmers were asked what projects they carried while enrolled in vocational agriculture. These are summarized below in number and percent.

Projects	Total	Percent
Hogs	90	41
Corn	46	21
Beef	21	9
Dairy	12	6
Poultry	10	55
Potatoes	12	6
Fruit	6	3
Sheep	6	3
Crops	6	3

Sixty-six percent of the projects dealt with livestock.

The young farmers were asked to indicate whether their project work was useful or not useful in helping them to become established in farming. Out of 120 replies, 55, or 46 percent replied that they were useful, while 65, or 54 percent replied they were not useful.

The relationship between the usefulness of projects and the number of years enrolled in vocational agriculture was considered in this study. Out of 42 young farmers who had four years of vocational agriculture, 29 of them considered their projects as useful in aiding them in becoming established in farming. Ten out of 23 young farmers who had three years of vocational agriculture reported that their projects were useful while only 14 out of 45 who had two years of training indicated projects as being useful and only two out of 10 who had one year termed projects as useful. These results indicate that the longer vocational agriculture studies are pursued, the more useful project work is in helping young men in becoming established in farming.

The ways in which the project work helped young farmers to become established in farming were as follows:

Ways	No.	Percent
Foundation stock	17	31
Finances	17	31
Finances & stock	14	26
Interest in farming	5	10
Interest and stock	1	2
Total	54	100

One-hundred and five young farmers evaluated their project work. These were as follows:

Ratings	No.	Percent
Very good	9	9
Good	76	72
Fair	18	17
Poor	2	2
Total	105	100

The young men were also asked to name the various types of agricultural education programs in which they participated after leaving school. The findings showed that 99 farmers attended 115 educational programs. Sixty-four percent of all the programs attended were adult evening programs in agriculture and 18 percent were part-time classes. Other programs consisted of extension meetings, young peoples' meetings, Farm and Home Week, and 4-H conventions.

Occupational Experience

Sixty-six of the young farmers engaged in some non-farm, occupational experience after leaving school. The job of trucking seemed to be the most popular as 10 young men had this experience while seven had some work in various skilled trades such as carpentry, bricklaying, etc. Others worked as clerks, salesmen, and day laborers. The mean number of years spent in these non-farm occupations was three.

One hundred of the 157 young farmers worked on their home farms for living expenses after leaving school. The average number of years they spent was four. Only 26, or 16 percent of the farmers worked at home for wages upon leaving school. Of these 26 young men 88 percent reported receiving less than \$500 per year, while the average annual wage was \$344.

Thirty of the young farmers had experience in partnership with their fathers after leaving school. The average number of years for this group was four. None of the partnerships involved legal contracts. The young farmers seemed to think that papers weren't necessary when the father was the partner. The average annual income for the partnership group was \$711.

Sixty-three of the farmers continued their home-farm enterprises after leaving school. The average number of years these enterprises were carried was four. The average annual income from them was \$169. One young farmer reported an annual income of \$900 for six years from a poultry enterprise which developed into a thriving hatchery business.

Fifty-four young men spent an average of 24 months working as hired hands. The average monthly income earned was \$31.

Establishment in Farming

One-hundred and twenty-one young farmers who started farming as tenants farmed an average of 115 acres. Seventy-six percent of the leases were of the share-crop type, 12 percent cash, and six percent 50-50 basis.

Ninety-six of the 121 young men who went into farming had an average of \$590 in cash. The average amounts for the various areas was \$571 for the grain

area, \$750 for the dairy area, \$407 for the meat area, and \$363 for the pasture area.

The sources from which 81 of the young men received the cash with which they began farming were as follows:

Sources	No.	Percent
Work earnings	48	59
Enterprises	14	18
Savings	5	6
Inheritance	5	6
Borrowing	4	5
Others	5	6
Total	81	100

The young men were also asked how much they borrowed each year after becoming established in farming and how much they paid back on their borrowings. The amounts borrowed varied from \$12,000 in three years to less than \$100 per year. The average for 45 young farmers who reported borrowing was \$621. The annual average amount paid back was \$421. This suggests that these beginning farmers had difficulty in paying back loans.

The 157 young farmers had been farming for an average of three years at the time of the interview. Only four young men became established immediately upon leaving school, which meant that 153 young men had to spend some time in various types of work before getting established in farming.

The average number of years which elapsed between the time the young farmers left school and the time they became established in farming was four years.

From the many factors which aid young men in becoming established in farming the writer selected seven as being most important. Each young farmer was asked to rank by numbers the seven factors in the numerical order of their importance, giving the rating of one to the most important. The young farmers were free to rate any other factors which they considered important, but no other was suggested.

The factors, in order of importance as rated by the young farmers for all areas is as follows:

1. Experience on the home farm
2. Assistance from parents and relatives
3. Agricultural education
4. Advice from parents
5. General education
6. Own reading and studying
7. Experience as a farm hand

Major Problems and Difficulties in Becoming Established

The young farmers were asked to indicate the major problems they encountered in becoming established in farming. Seven major problems were listed and ranked by each young farmer.

Eighty-six, or 20 percent of all the problems listed dealt with production; 76, or 18 percent pertained to housing problems; 69, or 16 percent securing stock; 63, or 15 percent securing finances; 56, or 13 percent management; 50, or 12 percent securing land; and 28, or six percent securing equipment.

Production problems were listed most frequently in all of the areas except one, and it was second high in that area.

The problem of securing equipment seemed to present the least difficulty in all of the areas. The problem of securing

financing, securing stock, production, providing housing, and management were consistently reported by young farmers in each of the areas as being difficult.

Each young farmer was asked to rate numerically in order of importance, the seven major problems he encountered in becoming established by using a rating of one to designate the most difficult problem, a rating of two to designate the second most difficult problem, and so on in order of decreasing difficulty.

The problems of the young farmers in order of difficulty were: securing finances, production, securing stock, providing housing, securing land, management, and securing equipment.

Breaking down the major problems into specific difficulties it was found that out of 63 mentioned in the problem of securing finances, 28 replies were of general financial nature while 10 reported difficulty of repaying debts, eight difficulty of obtaining a loan, seven no security, and five each, reluctance to borrow, and low income.

In the problem of production out of 86 replies 35 mentioned diseases of hogs, 18 run-down farms, 12 disease of cattle, four inbreeding hogs, four droughts, three feeding, and three indicated insects and pests.

In securing stock the young farmers reported 84 difficulties, of which 47 pertained to scarcity of good stock, 14 the high price of stock, and several mentioned they didn't know when to buy or how much to buy.

In providing housing 76 reported difficulties, 41 reported that more buildings were needed, while 26 indicated that the buildings were very poor and needed either repair or replacement.

In securing land 47 reported difficulties, 40 indicated that their chief difficulty was finding good land while four reported that they didn't have personal collateral and thus couldn't get land.

Fifty-six young farmers reported management problems. Thirteen indicated that the management of land was most difficult while 15 mentioned general difficulties. Nine indicated difficulty with landlords and relatives. Seven reported livestock managerial difficulty while six reported budgeting of time and four marketing procedures. Only two reported managing financing as a problem.

Only 28 reported difficulty in securing equipment. Nineteen of these reported no finances while six didn't indicate specific difficulties. Many of the young farmers who rented from relatives were able to use their kin's machinery, which might thus account for the low-difficulty rating of this problem.

The low-difficulty rating given to the problem of securing land was accounted for by the large number of young farmers who received land from their kin. It was revealed later that by breaking down the ratings of the young farmers who secured land from their kin and those who didn't that the 61 percent who obtained land from their kin ranked this difficulty as the least of their difficulties while the 31 percent who didn't obtain land from relatives rated the problem as their "number two" problem to finances.

Methods Employed in Solving Difficulties

The importance of borrowing as a method in solving the problem of secur-

ing finances was indicated by the findings that 50 out of 78 methods reported were this method. Earnings and saving were reported nine times, whereas inheritance was reported three times. No success in securing finances was indicated four times.

Out of 93 reports on the methods employed in solving production problems 22 reported sanitation, while 20 reported no success. Seven reported vaccination, seven rotation, six culling, five fertilizing, five liming, and four better feeding methods.

Twenty-one out of 77 methods employed in solving the problem of securing livestock were "raising their own stock." Eighteen indicated that they traveled and shopped about for their stock. Eleven indicated the use of purebred sires to secure better quality stock while only four said they purchased stock at sale barns.

Thirty-seven out of 83 replies in solving housing problems were reported as no success. This indicates the difficulty of tenants obtaining satisfactory housing requirements on their farms. Seventeen indicated new buildings were added while 11 reported that plans to build were made. Nine reports showed that annual repair was the method employed. The housing situation on many of these farms was very poor.

Out of 54 methods reported in solving the problem of securing land 24 reported the factor of kinship, nine reported individual effort, seven friendship, and five each persistence and "first bidder." The importance of other people helping young farmers to solve the problem of securing land is indicated by the fact that kinship and friendship accounted for 61 percent of all the methods reported.

Forty-seven methods were reported in solving the problem of management. Thirteen indicated no success, while 10 listed experience, eight father's advice, six increased knowledge, five planning, and one each such methods as, watching good farmers, moving to better farms, and budgeting time.

Thirty-four of the 60 reports on methods employed in solving the problem of securing equipment was the method of using kin's machinery. Purchasing machinery was reported eight times, no success six, purchase gradually six, and buy second-hand machinery five times.

Farm Practices Regularly Employed

One-hundred and fifty-five of the young farmers reported the practices they were employing regularly. The practices are listed with the number and percent of young farmers employing them as follows:

Practices	No.	Percent
Soil conservation.....	132	85
Purebred sires.....	128	83
Feed protein supplement.....	120	77
Feed minerals.....	111	72
Vaccinate hogs.....	104	67
Co-operate with A.A.A.....	80	52
Keep accounts.....	72	46
Keep production records.....	55	35
Worm hogs.....	51	33
Use McLean system.....	42	27
Modernize building.....	37	24
Lime Soil.....	20	13
Spray fruit trees.....	8	5

The average number of practices carried by each farmer was six.

Summary of Findings

1. Four years was the average length of the interval between leaving school and establishment in farming.

2. Eighty percent of all the home projects and 86 percent of the major projects carried by the young men while in high school were hog, corn, and beef projects.

3. The usefulness of project work in helping young men in establishment in farming was associated with the number of years of instruction in vocational agriculture.

4. The livestock carry-over used as foundation stock and the savings from home-farm projects were reported as being most important in aiding in establishment in farming.

5. The average number of years young men spent in each non-farming job after leaving school was two.

6. Forty-two percent of the young men worked in non-farming jobs after leaving school for an average period of three years.

7. Sixty-four percent of the 157 young farmers worked an average of four years on the home farm for expenses after leaving school and before becoming established in farming.

8. Only 17 percent of the young men worked for wages on the home farm after leaving school. These young men worked an average of three years, and received an average, annual wage of \$344.

9. Nineteen percent of the young farmers had partnership experience on the home farm after leaving school. Their average, annual income was \$711.

10. Fifty-four, or 34 percent of the young farmers had worked as hired hands on farms other than their home farm after leaving school. The average, monthly wage earned for an average of 24 months experience was \$31. Sixty percent of the 54 young men received \$24 or less per month.

11. Seventy-six percent of all the leases entered into by the young farmers on rented acreages were share crop. Cash rent was reported by 12 percent of the young men.

12. Forty-one percent of all the farms rented by young tenant farmers were rented from their relatives.

13. The young farmers who started out as tenant farmers first operated an average of 116 acres. After farming for three years these tenants were farming 131 acres.

14. The average amount of cash these young farmers had with which to start farming was \$590.

15. An average of \$621 was borrowed annually by 45 young farmers and they paid back annually an average of \$421.

16. Of the 20 farm owners 12 of them own farms that had belonged to their fathers.

Conclusions

Experience on the home farm and experience gained by working as a hired hand are regarded as the most important and least important factors, respectively, in helping young men in becoming established in farming.

Young men require approximately \$600 cash in addition to equipment,

stock, feed supplies, etc., when becoming established in farming. Approximately one-third of the young farmers borrow over \$600 each year for the operation of their farm and are \$200 in arrears in their annual payments.

Securing finances is the most difficult problem encountered by young farmers when becoming established, and borrow-

ing money is the most frequently employed method in solving the problem.

Diseases of livestock is the major difficulty encountered in production. Improved practices pertaining to livestock health are the most effective method employed to solve the difficulty.

*Based upon a thesis submitted to Graduate College of Iowa State College, June, 1940.

Personnel of Part-Time Classes in Minnesota

G. F. EKSTROM, Teacher Education,
St. Paul, Minnesota

IN MINNESOTA we are becoming increasingly aware of the many problems with which rural young men are confronted and the necessity for becoming familiar with situations surrounding this group if an effective program of instruction in part-time education is to be developed in the state. Some data of the social-economic order affecting prospective farmers are being brought together, and a few studies are being made relative to the establishment and placement of the students in farming.



G. F. Ekstrom

In order to learn more about the personal characteristics of the young men, the Department of Agricultural Education at the university, with the co-operation of 21 teachers, assembled information on 303 students who were enrolled in part-time classes during the 1940-41 school year. It is quite evident from the findings that the students enrolled in part-time classes in Minnesota have about the same characteristics as those studied elsewhere and that the degree to which they are established in farming is somewhat similar. Some of the data, however, differ from those previously reported and may be of interest to the readers of this magazine.

Ages

The modal age for the 303 students was 21 years, with a median age of 20.7, and a range in ages from 15 to 39. Approximately six percent were less than 18, and 11 percent were 25 years of age. The school at Warren, which included several students over 25 years of age, has been meeting for several years and now represents one of the more mature groups in the state, with the result that the instructor proposes to divide the class or to encourage the older members to become associated with an evening class for adult farmers. At New Richland, where two units have been taught for several years, one section is made up of younger students and the other of older and more mature students. (A discussion on part-time instruction with teachers during the 1941 fall conferences conducted by the State Department gives an indication that withdrawals of young men for military service or work in defense industries involved students 21 to 28 years of age for the most part, and that the

1941-42 classes will be made up quite largely of persons below and above this age spread.)

Previous Training

As might be anticipated, the formal education of the students terminated for the most part at the completion of the eighth and twelfth grades, the percent for the former being 40.9 and for the latter 37.6. Of the entire group, only six failed to complete the eighth grade and only eight reported training beyond high school.

Table I—Highest Grade Completed

Grade	No. Completing	Percent Completing
Under eighth	6	2.0
Eighth	124	40.9
Ninth	20	6.6
Tenth	18	5.9
Eleventh	2	0.7
Twelfth	114	37.6
Over twelfth	8	2.6
School of agriculture	1 (3 years)	.3
No answer	10	3.3
Total	303	100.0

Five of the centers in which the co-operating departments are located were established at the beginning of the fiscal school year, 1940-41, which provided no opportunity for previous instruction in vocational agriculture—at least in these departments. Only 84 of the entire group of 27.7 percent reported training in all-day classes ranging from one to four years. A somewhat larger proportion, 140 or 46.2 percent, had been enrolled previously in part-time classes, 15 of whom had attended five or more years. Seven of the latter were included in the Warren group where the maximum length of attendance, including the 1940-41 class, was eight years.

Family Relationships

In response to the question concerning marital status, only 12, or approximately four percent stated that they were married and 271, or 89.4 indicated that they were living with their parents. Two hundred seventy-three, or 90.1 percent of the students reported that their fathers were living, the average age of whom was 54.0 years, with ages ranging from 40 to 76. The data for the mothers were: 92.4 percent living, average age—50.0 years, and range in age from 33 to 73 years. It will be noted that a higher percentage of

the mothers were living and that their average age was four years younger than the average age of the fathers.

Two hundred and eighty of the respondents reported data upon brothers and/or sisters in their families. Of this number, 212 had a total of 408 sisters, 129 of whom were older, and 270 younger, with the ages of nine not given. The family status of 399 of the sisters was secured. Of these, 289 were staying at home and 110 away from home, 184 of them were in school and 215 out of school.

In the case of the brothers, 235 of the respondents had a total of 516 brothers, 205 of whom were older and 305 younger—with the ages of six not given. Of the older group, 93 were at home, and 112 away from home as contrasted to 273 of the younger brothers at home and 32 away from home. Only nine of the older brothers were in school, with 196 out of school as contrasted to 197 in school and 108 out of school for the younger brothers.

Occupational Status

Data were obtained on the occupational status of 276 students. One hundred eighty-four, or 66.7 percent of this number were "at home with a definite or indefinite allowance," 77, or 27.9 percent were "partners in a farm business at home," and 72, or 26.1 percent were "at home with income from one or more farming enterprises."

Of the 259 students staying at home, 72.2 percent lived on owned farms and 21.6 percent on rented farms, with the remainder of the parents classified as part-owner or managers. The size of the farms varied from an average of 134 acres at Hinckley to 481 at Warren. In the judgment of the students, general farming predominated on the farms represented in a majority of the communities, followed by dairy, livestock, and grain farming in other communities.

Data were supplied by 26 class members who worked on farms away from home. Sixteen of the 26 operators were owners, nine were renters, and one a part-owner. These farms ranged in size from 40 to 720 acres and averaged 242 acres. On 15 of the farms, a general type of farming was practiced, seven were primarily dairy farms, two livestock, and two grain.

Possessions

An effort was made in the study to ascertain the nature and extent of the assets which the members of the part-time classes possessed. Two hundred sixty-three, or 86.8 percent reported possessions including 140 with livestock, 41 with farm machines, 98 with automobiles, 78 with bank accounts, and 147 with life insurance. More of the boys owned dairy cattle than any other type of livestock, followed in order by hogs, horses, beef cattle, poultry, and sheep.

Farm machines were reported as owned by 41 students, 35 of whom reported valuations totaling \$24,040.35, or \$686.87 per student owning machines, including tractors.

Automobiles were owned by 98 persons, 92 of whom appraised their cars at an average of \$263. Seventy-eight of the young men reported bank accounts. Fifty-eight of the accounts aggregated \$9,483.50, or \$163.51 per account. Life

(Continued on page 138)

Future Farmers of America

L. R. HUMPHERYS

State Associations Awarded Gold Emblems

Texas

ALTHO Texas far outranks in size any other Future Farmer state association, it proved in winning one of the five top-place "Gold Emblem" awards for the entire nation, that it had more than mere size.

Every one of the 642 departments of vocational agriculture in the state had an active F.F.A. chapter, with 27,588 members among the 35,000 boys enrolled in vocational agriculture. This total indicates an increase of 24 chapters and 58 members.

Every chapter in the state operated with a written program of work, nearly 600 held local public speaking contests, 625 conducted home improvement programs, 635 engaged in conservation work, and 218 chapters made organized tours outside of the state.

The state association published a regular magazine and conducted a radio broadcast series. The state convention at Marshall brought more than 1,000 official delegates and a total attendance of more than 1,700. Each area officer in the state executive group visited a majority of his chapters, and the state president and secretary visited 85 chapters. The state president traveled 11,765 miles in 21 states and spoke at 75 different F.F.A. events.

Nearly 400 Texas Future Farmers attended the 1940 national convention bringing a band and having an exhibit at the national event. Members had more than a million and a quarter dollars invested in farming last year, while the state association operated on a budget of \$12,430.

Wyoming

For the fourth consecutive year, Wyoming's state Future Farmers of America Association has ranked among the best in the nation, again this year being placed as one of the five top groups to receive the "Gold Emblem" award at the fourteenth national F.F.A. convention at Kansas City.

Every one of the 41 vocational agriculture departments in the state had an active F.F.A. chapter, with the total of 1,093 members out of 1,844 vocational agriculture students representing an increase of two members. There were two new chapters during the year.

Every chapter in the state operated under a planned program of work, all had parent and son banquets, local public speaking contests, local news publications, and all followed parliamentary procedure in meetings.

Ninety-five percent of the chapters engaged in organized conservation work, 90 percent had some co-operative in operation for chapter treasury or member benefit. Many had organized programs in livestock loss prevention, and

90 percent had libraries with five or more Future Farmer books.

A state recreational and leadership camp brought together 125 members from 15 chapters. More than 40 radio broadcasts were sponsored during the year. A state band of 65 pieces, and regular state paper were other noteworthy accomplishments.

Ninety-five percent of the chapters were represented at the state convention. Twenty-two chapters were visited by state officers during the year. Members reported more than \$114,000 invested in farming last year.

Montana

Every department of vocational agriculture in a Montana high school had an active Future Farmer chapter, with 62 chapters and more than 1,800 members out of 2,300 enrolled in vocational agriculture work. This represented an increase of six chapters and 28 members for the year.

Nearly half the members in the state had long-time farming programs, 49 chapters engaged in organized, home improvement work, 49 held parent and son banquets, and 56 chapters engaged in organized co-operative effort for chapter treasury benefit.

A recreation and leadership summer camp held at Essiston brought about 50 members. Sixty-one radio broadcasts were given by local chapters. The state association published five issues of a printed magazine, and had a state F.F.A. brass band with 78 members participating.

The state convention at Bozeman brought 118 delegates, and a total attendance of nearly 500. During the year, state officers visited 27 chapters, and the state sent 12 members to the national convention, with an agricultural products exhibit from Montana.

Among co-operative activities stressed by the state association were the purchase of 415 head of livestock for members, securing 320 acres of land for agricultural department farms, 460 bushels of special seed purchased by chapters for members, and 16 pieces of machinery secured for members.

Virginia

One item unique in the nation is that in the Virginia Association the official manual is given to every new boy among the 8,000 members when he becomes affiliated with the organization. The above membership represents more than 90 percent of the students of vocational agriculture enrolled in the state, and is an increase of 62 members, with four new chapters, over the previous year.

Every department of vocational agriculture in the 249 high schools offering this work, has an active F.F.A. chapter.

Of this group, 117 maintained thrift banks, 146 entered the national chapter contest, 188 held parent and son banquets, 219 have chapter libraries containing Future Farmer books, 212 engaged in organized home improvement work, 178 sponsored organized conservation programs, and 216 chapters conducted co-operatives for financing the local treasuries or financially assisting individual members.

Eighty-five chapters in the state presented one or more radio programs. A state camp was operated with 315 members in attendance. At the state convention, 470 official delegates and 1,431 members were present. State officers visited 12 chapters during the year, and 38 members attended the national convention.

The state association had a budget of close to \$10,000 for the year, and members showed investments in farming of nearly \$400,000.

Oregon

The Oregon Association of Future Farmers of America gave ample proof of improvement over last year in winning one of the five top-ranking "Gold Emblem" awards for the entire nation, after having classified only as "Bronze Emblem" association the previous year.

The records show united participation in the state program of work, with all of the 53 chapters having full meeting equipment, written programs of work; using correct parliamentary procedure, sponsoring home improvement, and other items. There are F.F.A. chapters in every high school offering vocational agriculture—53 in all—with 2,040 members out of the 2,400 boys enrolled in vocational agriculture work.

Other outstanding state association accomplishments were that 49 chapters held public speaking contests, 45 had co-operative enterprises for chapter treasury or member profit, and all 53 chapters participated in the district conferences and state convention. Leadership training schools were conducted at Oregon State College and in six district conferences.

More than 50 radio broadcasts were sponsored in an organized series utilizing nine different stations. At the state convention at Corvallis, 96 percent of the chapters were officially represented in the total attendance of 550.

During the year, the state officers visited 27 chapters and sent 11 members to the national convention with an Oregon exhibit. Members had more than a quarter-million dollars invested in their home farming enterprises, and the state association budget was about \$1,500.

The manner in which one single ray of light, one single precious hint, will clarify and energize the whole mental life of him who receives it, is among the most wonderful and heavenly of intellectual phenomena.—Arnold Bennett

F.F.A. Livestock Medicine Kit

HAROLD L. KUGLER, Adviser,
Manhattan, Kansas

THE purchase of materials for a "farm livestock medicine kit" was introduced as a new co-operative activity by members of the Manhattan chapter of Future Farmers of America during the past school year.

The purpose of this activity was to supply F.F.A. members with information on the correct procedure to follow in handling common livestock ailments as well as to provide materials accessible for use in the treatment of these ailments. The medicine kits provide a place to keep livestock medicinal supplies in a centrally located place on the farm.

A lesson unit was prepared for class study entitled "Prevention and Control of Common Livestock Ailments." A veterinarian was consulted in setting up the control and preventive measures to be used.

Chapter members prepared lists containing kinds and amounts of materials they thought necessary to meet the needs of the various livestock enterprises on their home farms. The chapter committee on co-operative purchasing secured prices from local pharmacies and local supply companies for the total amounts of materials needed. Each chapter member was assessed for the amount of his individual purchase and final purchase was made by the committee in charge of this F.F.A. activity.

Seventeen chapter members co-operatively purchased materials totaling \$27.50. Some of the items purchased included: pine tar oil, benzol, Kreso dip, iodine, epsom salts, etc. Many of the items were purchased in bulk and repackaged according to the amount ordered by each student. This resulted in a net saving for each chapter member co-operating.

The F.F.A. members co-operating constructed medicine kits from used apple boxes. The boxes were conditioned by the addition of a hinged door, shelves were installed, the kit was painted with aluminum paint, and "F.F.A. Livestock Medicine Kit" stenciled on the outside. The total cost of converting the apple box into a medicine kit was 25c per kit.



F.F.A. members repackaging materials for livestock medicine kit

A Successful Chapter Loan Fund

H. F. PETERS, Adviser, Caruthers, California

IN LEAVING Caruthers as a teacher of agriculture the writer wished he could take the chapter loan fund with him. It has made the agricultural department what it is. The reasons will become clear as the details of how our chapter loan fund operates are described.

Chapter loans are made only for the period of time a boy is in school and is a bonafide F.F.A. member. Upon graduation or removal from school for other causes his loan becomes due and payable



H. F. Peters

ber's chance for losses or net profit. A contract is filled out covering the amount of loan required, duration of the loan, what the money is to be used for, and a provision to allow the title to remain in the name of the chapter until the loan is paid in full. The time and manner of marketing is also set up as a part of the agreement. This agreement is signed by both the parent and the Future Farmer making the loan. This whole agreement constitutes a note with interest at the rate of five percent.

Safeguards

It should be said that the application is signed by the instructor and presented to the chapter officers for their consideration. If the application is approved, the president, the secretary, and the treas-



Caruthers F.F.A. Chapter Officers

at once. When a loan is requested by a member certain minimum requirements for the supervised farming program are first met by the member. The instructor, of course, visits the home and parents and determines the possibilities of the mem-

ber approve by signature for a loan. Upon completion of this routine the applicant receives the money or feed or an order issued by the adviser for purchasing of the material in question.

The chapter has established a ruling to the effect that loans will be made only for seed, feed, and livestock. It should also be understood that the chairman of the school board, the principal of the high school, and the teacher of agriculture are designated as the trustees of the chapter loan fund but act only in an advisory capacity.

In the early stages of the chapter-loan business a limit of \$200 per individual loan was placed, but later this was adjusted so that some of the members were carried for three or four hundred dollars. There was also a provision that before being granted a second loan, each borrower must agree to put at least 40 percent of the labor income of his first project into the second one in order to be eligible for finances from the chapter funds.

The average size loan was about \$150. We had practically no protection against losses as the signature of the parent did not guarantee payment of the loan, neither did the student borrower, other than thru the earnings of the project activities. We have had to follow up with the second financing on some projects

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Personnel of Part-time Classes

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insurance policies were carried for 147 students, of whom 132 reported amounts of insurance carried averaging \$1,478.79. The size of the policies ranged from \$500 to \$10,000 and included various types of protection. A few of the students, 16 in all, listed 1,625 acres of land owned, or an average of 101.6 acres.

In addition to the foregoing assets, miscellaneous possessions were listed by 41 students, 38 of whom placed a total valuation of \$8,258.50, or an average of \$217.33 per student on the unclassified list. Included among these possessions were bicycles, guns, bonds, hand tools, creamery stock, corn, portable hog houses, equipment for feeding livestock, stands of bees, fishing tackle, musical instruments, and furniture.

A considerable number of the students—57 in all—stated that they owned certain items in partnership with others. Fifty-one reported values to the extent of \$53,806, of which their shares amounted to \$23,931, or 44.5 percent. Most of the items owned in partnership involved livestock of different types with other items including tractors, trucks, farm machines, and automobiles.

Assistance Received From Others

Apparently the number of young men enrolled in part-time classes in Minnesota who inherit money or property at their age is insignificant. At least only three of

Know Your Farmers

WE HAVE heard a great deal lately relative to the fact that the teacher of agriculture should know the farm people and the farm conditions of the community in which he teaches. If all teachers agree that this is true, some consideration should be given to this matter in each community. This would apply to all teachers because long tenure in a school does not necessarily mean that the teacher knows his community. It is easy for the teacher who has lived in a community for several years to feel that he knows the needs of the community, but each teacher should ask himself detailed questions about his community to test his knowledge.

What activities of the teacher of vocational agriculture bring him the definite information needed relative to his community? Each teacher can name several activities that will help in learning the community, but this article is directed at a criticism received from some quarters that the teacher does not help the farmer with his farm problems on his farm even after meeting with the farmers in evening classes.

Evening-class instruction is a means for carrying on organized instruction but cannot be as effective without farmer supervision and visitation as with it.

Further Farming Plans

The students were asked to indicate what further plans they may have had for getting started in farming. The 69

Therefore, each teacher should make every possible effort to work with all the farmers in his community and know each farmer's problem by helping solve some of the problems found on each farm.

How many farms in your community can you name that you have been on and have discussed farm problems with the farmer? By doing this in carrying out supervision of organized classes, you will learn your community and your farmers. Farmers want to know you and will be critical if they do not have that opportunity.—Mississippi Vocational News

A Successful Chapter Loan Fund

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where misfortune occurred in order to give the individual boy a chance to compensate for bad luck or to recover from misfortune.

The Instructor Checks on Plans

The chapter adviser made an extra effort in checking all farming programs with every boy, whether financed thru the fund or not, to see that there was a definite opportunity to make money in the proposed agricultural venture. As a result of this precaution the agricultural department during the past year has had the honor of having the largest number of projects in each farming program per student and also the largest labor income per student of all departments in California. It should be said that the wholehearted interest and support of the principal has done much to make this record possible. The reader may ask the question, "Have boys become established in farming as a result of the operation of this loan fund?" Yes, definitely so. During the last three years the writer can think of 15 graduates who owe in a considerable measure their present gainful farming situation to the help received from this fund.

It would be very desirable if more local chapters could operate a loan fund for the use of Future Farmer members. With due diligence on the part of the instructor this money would always be worth 100 cents on the dollar, and more important, the farming programs in such districts would become more business-like and more remunerative.

Up to 1935 the chapter had accumulated about \$500 in its loan fund, and in 1936, the efforts of the agriculture instructor, Mr. J. F. Edmonson, and prominent rancher, Mr. L. E. Wrasse, gave the chapter \$500 to be used in the loan fund. Again in 1937 Wrasse donated \$1,000. Since 1938, thru the interest and other earnings of the fund, it now totals \$2,700. This money is kept very busy in financing boys' projects.

Our civilization rests at bottom on the wholesomeness, the attractiveness, and the completeness, as well as the prosperity, of life in the country.

The great rural interests are humankind's interests, and good crops or livestock are of little value to the farmer unless they open the door to a good kind of life on the farm.

—Theodore Roosevelt

Table II—Livestock and Poultry Owned by 140 Different Students

Type	Number Indicating Ownership	Number Owned	Average Owned	Total Value	Average Value
Dairy cattle.....	65	340 (64 boys)	5.3	\$16,615.00 (260 head)	\$63.90
Hogs.....	57	497 (55 boys)	9.0	4,983.00 (431 head)	11.56
Horses.....	47	116 (46 boys)	2.5	7,200.00 (96 head)	75.00
Beef cattle.....	40	182 (39 boys)	4.7	9,663.00 (166 head)	58.21
Poultry.....	26	4,279 (26 boys)	164.6	1,809.50 (3,199 birds)	57
Sheep.....	25	501 (25 boys)	20.0	5,411.00 (501 head)	10.80
Total value of livestock and poultry owned by 140 students.....				\$45,681.50	
Average investment in livestock and poultry by 140 students.....				326.30	

the respondents reported that they had inherited money and only six that they had inherited property.

Some other assistance was, however, received from parents. The major types of such assistance received were reported by 94 persons as follows:

Assistance Received	Number
From Parents	Cases
Given livestock.....	25
Financial assistance.....	18
Use of machinery.....	9
Rental of land.....	7
Partnerships.....	7
Projects.....	6
Miscellaneous.....	22

Credit to finance their farming activities was obtained by 91 of the part-time students with local banks as the major source.

Source of Credit	Cases
Local bank.....	43
Businessmen.....	18
Federal Land Bank.....	11
Parents.....	8
Production Credit	
Association.....	5
Other sources.....	6
Total.....	91

who indicated definite plans proposed to do the following things:

Plans	Cases
Increase livestock.....	18
Rent a farm.....	9
Purchase land.....	9
Take over home farm.....	8
Go into partnership.....	7
Expand projects.....	5
Work up.....	4
Other plans.....	9

Membership in Organizations

Two hundred sixty-four of the students indicated that they participated in organizational activities. A large majority of them—243 of the 264—belonged to a church, 62 attended Sunday school, 38 were members of the farm bureau, two of the farmers' union, and 11 were members of lodges. Fifty-four were affiliated with co-operative creameries, and 48 with other co-operatives.

Let the farmer forevermore be honored in his calling; for they who labor in the earth are the chosen people of God.

—Thomas Jefferson

